

AMENDMENTS TO THE SPECIFICATION

Please amend the specification of the present application by substituting the following title for the title presently in the application:

Image Heating Apparatus and Image Forming Apparatus Including Synchronization of
Magnetic Flux Generation

Please amend the specification of the present application by amending each of the paragraphs identified below in the manner indicated:

Please amend the paragraph starting on page 11, line 11, to read as follows:

FIG.8 is an explanatory drawing of the electromagnetic induction action of an image heating apparatus according to Embodiment 1 of the present invention showing a cross-sectional view perpendicular with respect to the rotation axis;

Please amend the paragraph starting on page 11, line 15, to read as follows:

FIG.9 is a configuration drawing of a magnetic flux adjustment section viewed from the direction indicated by arrow H in FIG.8 showing a cross-sectional view parallel with respect to the rotation axis;

Please amend the paragraph starting on page 29, line 13, to read as follows:

As shown in the cross sectional view in FIG.8, that is perpendicular with respect to the rotation axis 117, and the cross sectional view in FIG.9, that is parallel with respect to the rotation axis 117, opposed core 116 is configured so that ~~its cross-sectional shape~~ the shape of the cross section parallel with respect to rotation axis 117 varies in the axial direction between the part corresponding to the narrow paper ~~passage~~ non-passage area and the ~~end~~ central parts. In opposed core 116 according to Embodiment 1, semicylindrical core members 116a and 116b are fitted in combination in the axial direction of a rotating spindle 117 with their phases varying by 180 degrees relative to

rotating spindle 117. The clearance between the circumferential surface of opposed core 116 and the inner peripheral surface of retaining roller 113 is 0.5 mm.

Please amend the paragraph starting on page 35, line 19, to read as follows:

Next, the operation of opposed core 116 will be described. When the surfaces of core members 116a and 116b of opposed core 116 ~~are opposite and~~ come close to ~~fixing belt 112 and face exciting coil 120~~, the magnetic permeability of the area through which magnetic flux M passes increases. As a result, the magnetoresistance of this area falls, and magnetic coupling between exciting coil 120 and fixing belt 112 improves.

Please amend the paragraph beginning on page 36, line 1, to read as follows:

On the other hand, when the surfaces of core members 116a and 116b of opposed core 116 are distanced from ~~fixing belt 112~~ excitation coil 120, magnetic flux M passes through air, which has low magnetic permeability. Therefore, in this state, the heat production temperature of fixing belt 112 in this area falls.

Please amend the paragraph beginning on page 36, line 21, to read as follows:

Next, the rotational phases of opposed core 116 and the excitation operation patterns of exciting coil 120 will be described with reference to FIG.10A and FIG.10B. In FIG.10A, the horizontal axis indicates the passage of time, and the vertical axis indicates with a solid line and dotted line respectively the lengths ~~faced by~~ core members 116a and 116b (hereinafter simply referred to as areas "a" and "b") of in the areas of opposed core 116 come close to and face in exciting excitation coil 120 (the length in the cross-

sectional view perpendicular with respect to the rotation axis). The lengths faced by areas a and b of opposed core 116 in exciting coil 120 vary with the passage of time since opposed core 116 rotates continuously. Point P indicates the state shown in FIG.8 where area a is directly opposite exciting coil 120.